



U.S. Department  
of Transportation  
**Research and  
Special Programs  
Administration**

400 Seventh St., S.W.  
Washington, D.C. 20590

**COMPETENT AUTHORITY CERTIFICATION  
FOR A FISSILE  
RADIOACTIVE MATERIALS PACKAGE DESIGN  
CERTIFICATE USA/9285/AF-85, REVISION 2**

This certifies that the radioactive materials package design described below has been certified by the Competent Authority of the United States as meeting the regulatory requirements for a packaging for fissile radioactive materials as prescribed in the regulations of the International Atomic Energy Agency<sup>1</sup> and the United States of America<sup>2</sup>.

1. Package Identification - SRP-1
2. Packaging Description and Authorized Radioactive Contents - as described in U.S. Nuclear Regulatory Commission Certificate of Compliance No. 9285, Revision 2 (attached).
3. Criticality -
  - a. Criticality Transport Index - 0.6
  - b. Allowable Number of Packages per Conveyance - as stated in Table XI of IAEA regulations.
  - c. The criticality analysis considered both the presence and absence of water in all void spaces.
4. General Conditions -
  - a. Each user of this certificate must have in his possession a copy of this certificate and all documents necessary to properly prepare the package for transportation.
  - b. Each user of this certificate, other than the original petitioner, shall register his identity in writing to the Office of Hazardous Materials Technology, (DHM-23), Research and Special Programs Administration, U.S. Department of Transportation, Washington D.C. 20590-0001.
  - c. This certificate does not relieve any consignor or carrier from compliance with any requirement of the Government of any country through or into which the package is to be transported.

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1 "Safety Series No. 6, Regulations for the Safe Transport of Radioactive Materials, 1985 Edition (As amended 1990)" , published by the International Atomic Energy Agency (IAEA), Vienna, Austria.

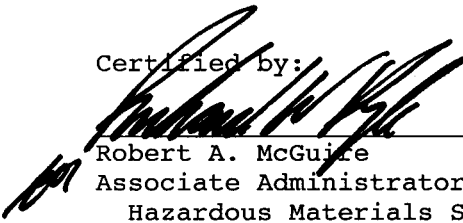
2 Title 49, Code of Federal Regulations, Parts 100 - 199, United States of America.

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- d. Records of Quality Assurance activities required by Paragraph 209 of the IAEA regulations shall be maintained and made available to the authorized officials for at least three years after the last shipment authorized by this certificate. Consignors and consignees in the United States exporting or importing shipments under this certificate shall satisfy the requirements of Subpart H of 10 CFR 71.
5. Marking and Labeling - The package shall bear the marking USA/9285/AF-85 in addition to other required markings and labeling.
6. Expiration Date - This certificate expires on October 31, 2008.

This certificate is issued in accordance with paragraph 712 of the IAEA Regulations and Section 173.471 of Title 49 of the Code of Federal Regulations, in response to the petition and information dated August 27, 2003 submitted by Global Nuclear Fuel - Americas, Wilmington, and in consideration of other information on file in this Office.

Certified by:

  
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Robert A. McGuire  
Associate Administrator for  
Hazardous Materials Safety

SEP 25 2003

\_\_\_\_\_  
(DATE)

Revision 2 - Issued to endorse U.S. Nuclear Regulatory Commission Certificate of Approval No. 9285, Revision 2.

**CERTIFICATE OF COMPLIANCE  
FOR RADIOACTIVE MATERIAL PACKAGES**

1. a. CERTIFICATE NUMBER	b. REVISION NUMBER	c. DOCKET NUMBER	d. PACKAGE IDENTIFICATION NUMBER	PAGE	PAGES
9285	2	71-9285	USA/9285/AF-85	1	OF 2

**2. PREAMBLE**

- a. This certificate is issued to certify that the package (packaging and contents) described in Item 5 below meets the applicable safety standards set forth in Title 10, Code of Federal Regulations, Part 71, "Packaging and Transportation of Radioactive Material."
- b. This certificate does not relieve the consignor from compliance with any requirement of the regulations of the U.S. Department of Transportation or other applicable regulatory agencies, including the government of any country through or into which the package will be transported.

**3. THIS CERTIFICATE IS ISSUED ON THE BASIS OF A SAFETY ANALYSIS REPORT OF THE PACKAGE DESIGN OR APPLICATION**

- a. ISSUED TO (Name and Address)  
Global Nuclear Fuel - Americas, L.L.C.  
P.O. Box 780  
Wilmington, NC 28402
- b. TITLE AND IDENTIFICATION OF REPORT OR APPLICATION  
General Electric Company application dated August 1, 1998, as supplemented.

**4. CONDITIONS**

This certificate is conditional upon fulfilling the requirements of 10 CFR Part 71, as applicable, and the conditions specified below.

**5.**

**(a) Packaging**

- (1) Model No.: SRP-1
- (2) Description:

A steel drum for the transport of solid uranium-contaminated residues. The packaging is a 55-gallon, open-head drum with a minimum 16-gauge shell and bottom head, and a minimum 16-gauge closure lid. The lid is closed by a 12-gauge bolted locking ring with drop forged lugs, one of which is threaded, having a 5/8 inch bolt and nut. The closure includes a gasket. The gross weight of the package, including the maximum weight of contents, is 825 pounds.

- (3) Drawings

The packaging is constructed and assembled in accordance with General Electric Company Drawing No. 0025E98, Rev. 1.

**(b) Contents**

- (1) Type and form of material

Uranium-contaminated solid residues.

- (2) Maximum quantity of material per package

775 pounds. The maximum uranium enrichment is 5.0 weight percent U-235. The maximum fissile mass is 104 grams U-235 per package, and the maximum average fissile mass density in the package is 0.5 gram U-235 per liter. In addition, the uranium may not exceed 0.05 weight percent U-234 and 0.025 weight percent U-236.

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(c) Transport Index for Criticality Control (Criticality Safety Index)

Minimum transport index to be shown  
on label for nuclear criticality control: 0.6

6. In addition to the requirements of Subpart G of 10 CFR Part 71:

- (a) The package must be prepared for shipment and operated in accordance with the Operating Procedures in Section 7 of the application.
- (b) Each packaging must be acceptably tested in accordance with the Acceptance Tests in Section 8 of the application.

7. The package authorized by this certificate is hereby approved for use under the general license provisions of 10 CFR §71.40.

8. Expiration date: October 31, 2008.

**REFERENCES**

General Electric Company application dated August 4, 1998.

Supplements dated: October 2, 1998; October 17, 1999; and August 6, 2003.

John D. Monninger, Chief  
Spent Fuel Licensing Section  
Spent Fuel Project Office  
Office of Nuclear Material Safety  
and Safeguards

Date: August 18, 2003